UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/241,853	02/02/1999	TIMOTHY L KOHLER	36J.P187	9230

5514 7590 02/23/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
POKRZYWA, JOSEPH R	

ART UNIT	PAPER NUMBER
2622	12

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/241,853	KOHLER ET AL.	
	Examiner	Art Unit	
	Joseph R. Pokrzywa	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8-11,13,16,18,21,24,25,27-30,34,46,72,73 and 79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *27-30,34,72,73 and 79* is/are allowed.

6)☒ Claim(s) *1,8-11,13,16,18,21,24,25 and 46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/4/03 has been entered.

Response to Amendment

2. Applicant's amendments, received on 11/3/03 and 12/4/03, have been entered and made of record. Currently, **claims 1, 8-11, 13, 16, 18, 21, 24, 25, 27-30, 34, 46, 72, 73, and 79** are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1 and 46** are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano (U.S. Patent Number 5,828,781).

Regarding ***claim 1***, Nakano discloses computer-executable process steps (see Figs. 5 and 6) to provide an application programming interface (API, interpreted as the "learning processing" read in abstract, column 7, lines 8 through 30, and column 12, line 47 through column 13, line 43), with the API providing a common software interface between an application program (the processing of the control unit 11) and a plurality of color measuring devices (colorimetry unit 13, image input device 20A, and image input device 20B) including a first color measuring device (colorimetry unit 13, column 7, lines 31 through 47) and a second color measuring device (image input device 20A, column 8, lines 19 through 33) each having at least one color measuring sensor (column 7, lines 31 through 47, and column 8, lines 19 through 33), wherein the first color measuring device and the second color measuring device are different types of color measuring devices (column 7, lines 31 through 47, and column 8, lines 19 through 33), the computer-executable process steps comprising plural functions for operating any of the plurality different types of color measuring devices (see Fig. 6, wherein steps A5-A11 operate for colorimetry unit 13, and steps A15-A23 operate for image input unit 20A), wherein in order to complete an operation performed by at least one of the plural functions (see Fig. 6), the function that performs the operation must be called a number of times which is different for at least the two different types of color measuring devices (column 10, lines 36 through 53, and column 11, lines 5 through 28), and wherein for a color measuring device that is being operated, the API (the learning processing, seen in Fig. 6) provides the application program with flow

control data of the number of times that the function must be called (column 10, line 3 through column 11, line 28).

Regarding ***claim 46***, Nakano discloses a computer-readable medium (color correction unit 12, column 6, lines 31 through 43) which stores computer-executable process steps (see Figs. 5 and 6), the computer-executable process steps to provide an application programming interface (API, interpreted as the "learning processing", read in abstract, column 7, lines 8 through 30, and column 12, line 47 through column 13, line 43), with the API providing a common software interface between an application program (the processing of the control unit 11) and a plurality of color measuring devices (colorimetry unit 13, image input device 20A, and image input device 20B) including a first color measuring device (colorimetry unit 13, column 7, lines 31 through 47) and a second color measuring device (image input device 20A, column 8, lines 19 through 33) each having at least one color measuring sensor (column 7, lines 31 through 47, and column 8, lines 19 through 33), wherein the first color measuring device and the second color measuring device are different types of color measuring devices (column 7, lines 31 through 47, and column 8, lines 19 through 33), the computer-executable process steps comprising plural functions for operating any of the plurality different types of color measuring devices (see Fig. 6, wherein steps A5-A11 operate for colorimetry unit 13, and steps A15-A23 operate for image input unit 20A), wherein in order to complete an operation performed by at least one of the plural functions (see Fig. 6), the function that performs the operation must be called a number of times which is different for at least the two different types of color measuring devices (column 10, lines 36 through 53, and column 11, lines 5 through 28), and wherein for a color measuring device that is being operated, the API (the learning processing, seen in Fig. 6)

provides the application program with flow control data of the number of times that the function must be called (column 10, line 3 through column 11, line 28).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 8-11, 13, 16, 18, 21, 24, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (U.S. Patent Number 5,828,781) in view of Chao (U.S. Patent Number 6,404,517, cited in the Office action dated 7/30/03).

Regarding ***claim 8***, Nakano discloses computer-executable process steps (see Figs. 5 and 6) to provide a software application programming interface (API, interpreted as the "learning processing" read in abstract, column 7, lines 8 through 30, and column 12, line 47 through column 13, line 43), with the API providing a common software interface between an application program (the processing of the control unit 11) and a plural different types of color measuring devices (colorimetry unit 13, image input device 20A, and image input device 20B) each having at least one color measuring sensor (column 7, lines 31 through 47, and column 8, lines 19 through 33), the computer-executable process steps comprising plural functions for operating any of the plural different types of color measuring devices (see Fig. 6, wherein steps A5-A11 operate for colorimetry unit 13, and steps A15-A23 operate for image input unit 20A), the plural functions comprising a calibrate-position function to calibrate a relative position of a recording

medium with respect to any of the plural different types of color measuring devices (column 9, lines 24 through 45, and column 10, lines 3 through 9), a calibrate-sensor function to calibrate any of the color measuring sensors of any of the plural different types of color measuring devices (column 10, line 3 through column 11, line 28, and column 13, lines 24 through 49), wherein in order to complete an operation performed by at least one of the plural functions (see Fig. 6), the function that performs the operation must be called a number of times which is different for at least the two different types of color measuring devices (column 10, lines 36 through 53, and column 11, lines 5 through 28), and wherein for a color measuring device that is being operated, the API (the learning processing, seen in Fig. 6) provides the application program with flow control data of the number of times that the function must be called (column 10, line 3 through column 11, line 28).

Further, Nakano teaches of calibrating using a standard color sample having standard color blocks, arranged in a matrix (as read in column 10, line 65 through column 11, line 1). However, Nakano fails to particularly teach of a move-to-patch function to relatively position any of the color measuring sensors and a color patch being provided with a logical color patch number by the application program, and a make-measurement function to make a color measurement of the patch at which any of the color measuring sensors is relatively positioned, the make-measurement function providing the application program with a color measurement value for the color patch. Chao discloses computer-executable process steps (column 9, lines 28 through 39) to provide an application programming interface (API, interpreted as the image processing unit 14, seen in Fig. 4, and column 9, lines 6 through 27), with the API providing a common interface between an application program and plural different types of color measuring

devices each having at least one color measuring sensor (see Figs. 1A and 2, and column 6, line 38 through column 7, line 9), the computer-executable process steps comprising plural functions for operating any of the plurality different types of color measuring devices (column 6, line 38 through column 7, line 9, and column 7, line 61 through column 8, line 67), the plural functions comprising a calibrate-position function to calibrate a relative position of a recording medium with respect to any of the plural different types off color measuring devices (column 6, lines 17 through 66, and column 8, lines 13 through 47), a calibrate-sensor function to calibrate any of the color measuring sensors of any of the plural different types of color measuring devices (column 6, lines 17 through 61), a move-to-patch function to relatively position any of the color measuring sensors and a color patch (column 8, lines 13 through 67) being provided with a logical color patch number by the application program (column 8, lines 9 through 47), and a make-measurement function to make a color measurement of the patch at which any of the color measuring sensors is relatively positioned (column 8, line 40 through column 9, line 5), the make-measurement function providing the application program with a color measurement value for the color patch (column 9, lines 1 through 5). Further, Chao teaches that in order to complete an operation performed by at least one of the plural functions, the function that performs the operation must be called a number of times which is different for at least two different types of color measuring devices (see Fig. 2, column 6, lines 41 through 48, and column 7, lines 34 through column 8, line 47, wherein the registration mark processor 66 and the calibration unit 54 are called when scanner 18 is operated, whereas only the calibration unit 54 is called when operating measuring device 46), and wherein for a color measuring device that is being operated, the API provides the application program with flow control data of the number of times that the

function must be called (column 3, line 56 through column 4, line 14, column 6, lines 49 through 61, and column 7, lines 34 through 60). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature, thereby conforming to well-known methods of using a color patch sheet, recognized by Chao.

Regarding ***claim 9***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the calibrate-position function provides the application program with at least one display value that is to be displayed (registration marks, seen in Fig. 3, column 8, lines 6 through 47) so as to instruct a user to position the recording medium or to position any of the color measuring sensors (column 7, lines 48 through 60, and column 8, lines 48 through 67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature, thereby conforming to well-known methods of using a color patch sheet, recognized by Chao.

Regarding ***claim 10***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the calibrate-sensor function provides the application program with at least one display value that is to be displayed (registration marks, seen in Fig. 3, column 8, lines 6 through 47) so as to instruct a user in calibrating the sensor (column 8, lines 14 through 67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the further teachings of Chao in the system of Nakano.

Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature.

Regarding ***claim 11***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the move-to-patch causes the color measuring device to move any of the color measuring sensors so as to relatively position any of the color measuring sensors and the color patch (column 8, lines 48 through 67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature, thereby conforming to well-known methods of using a color patch sheet, recognized by Chao.

Regarding ***claim 13***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the move-to-patch function causes the color measuring device to move the recording medium so as to relatively position any of the color measuring sensors and the color patch (column 8, lines 48 through 67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature, thereby conforming to well-known methods of using a color patch sheet, recognized by Chao.

Regarding ***claim 16***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the make-measurement function provides the application program with at least one display value that is to be displayed (registration marks, seen in Fig. 3, column 8, lines 6 through 47) so as to instruct the user in making the color measurement (column

8, lines 14 through 67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature, thereby conforming to well-known methods of using a color patch sheet, recognized by Chao.

Regarding ***claim 18***, Nakano and Chao disclose the process steps discussed above in claim 8, and Nakano further teaches that the flow control data is provided by the function which must be called the number of times in order to complete the operation (column 10, lines 36 through 53, and column 11, lines 5 through 28).

Regarding ***claim 21***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the plural functions further comprise a get-device-capabilities function to provide the application program with the flow control data (column 7, lines 23 through 47, and column 8, lines 32 through 37). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the further teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature.

Regarding ***claim 24***, Nakano and Chao disclose the process steps discussed above in claim 8, and Chao further teaches that the plural different types of color measuring devices include XY tables and hand-held patch readers (column 1, lines 11 through 37, column 3, lines 2 through 33, and column 6, lines 31 through 66). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the further

teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature.

Regarding ***claim 25***, Nakano and Chao disclose the process steps discussed above in claim 8, and Nakano further teaches that the plural different types of color measuring devices include spectrometers and densitometers (column 7, lines 31 through 47). However, Nakano fails to teach if the plural different types of color measuring devices include densitometers. Chao teaches that the plural different types of color measuring devices include spectrometers and densitometers (column 6, lines 31 through 66). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the further teachings of Chao in the system of Nakano. Nakano's system would easily be modified to include the teachings of Chao, as the systems share cumulative features, being additive in nature.

Allowable Subject Matter

7. **Claims 27-30, 34, 72, 73, and 79** are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding ***claims 27 and 72***, in the examiner's opinion, it would not have been obvious to have the process steps, as claimed, further include the limitations of providing the application program with a call-again value in a case that the move-to patch function needs to be called multiple times to complete the relative positioning of the color measuring sensors, and providing the application program with a call-again value in a case that he make-measurement function needs to be called multiple times to complete making the color measurement of the color patch and has not been called the multiple times. The closest prior art Chao (U.S. Patent Number

6,404,517) and Nakano (U.S. Patent Number 5,828,781) each fail to particularly teach these limitations. Because of this, the claims are rendered allowable.

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Shiraiwa (U.S. Patent Number 6,611,621) discloses a color correction process which utilizes an API; and

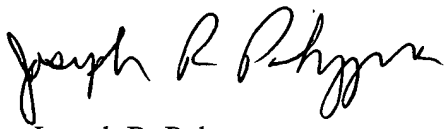
Giorgianni *et al.* (U.S. Patent Number 5,956,044) discloses an appearance matching system.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph R. Pokrzywa
Examiner
Art Unit 2622

jrp